



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER, PATENT AND TRADEMARKS  
P.O. Box 1418  
Alexandria, Virginia 22304-1418  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 072,677	02/07/2002	Edward R. Fyfe	FYFE1-4	2804

7510 05/21/2003  
CALIF KIP TERVO  
6387 CAMINITO LAZARO  
SAN DIEGO, CA 92111

EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Keep in case.

## Office Action Summary

Application No.

10/072.677

Applicant(s)

FYFE, EDWARD R.

Examiner

Ula C Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 12-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11, drawn to a method for increasing the resistance of a structure to explosive forces, classified in class 52, subclass 741.3.
  - II. Claims 12-25, drawn to a composite, classified in class 442, subclass 64.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by another method, i.e. by coextruding the first and second elastomer layers onto the textile.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Calif Tervo on May 7, 2003, a provisional election was made with traverse to prosecute the invention of Group II, claims 12-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Objections***

5. Claim 25 is objected to because of the following informalities: the word "menas" has been misspelled. It appears as though Applicant meant "means." Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 12, 13, 15-17, and 19-23 rejected under 35 U.S.C. 102(b) as being anticipated by Pileggi et al. (US 5,488,912). Pileggi et al. disclose panels made of cloth that are coated with wear-resistant polymeric material to enhance resistance to mechanical erosion (abstract). The panels are of adequate strength, corrosion resistant, and lightweight (col 2, ln 1-3). The textile-based fabric layer are covered with a protective coating to protect the textile fibers which provide the bulk of the tensile strength of each panel from mechanical abrasion, from harmful chemical reactions, and from potentially damaging radiation (col 6, ln 15-19). The preferred material for the fabric layer is a plain weave cloth (i.e. a woven fabric) woven of yarns of twisted fibers of an aramid material, such as Kevlar (col 6, ln 20-25). It should be noted that the Examiner is equating the Kevlar aramid yarns of Pileggi et al. to be the same as Applicant's polyaramid yarns. The coating wear-resistant polymeric material is prepared from a room temperature curing polyurethane material that is spread on each of the opposite surfaces of the aramid fiber cloth in a liquid form,

Art Unit: 1771

and then is allowed to cure (col 6, ln 46-57). An acceptable polyurethane material for use as the coating is a two-part polyurethane casting elastomer (col 7, ln 15-21). The polyurethane has similar properties to Applicant's polyurethane as shown on page 6, lines 33-35, of Applicant's specification. With regard to claims 16, 17, and 22, the method of forming an article is not germane to the issue of patentability of the article itself. Furthermore, in the present invention, regardless of the intermediate steps required to form the article, the resulting final product is the same.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Pileggi et al. (US 5,488,912), as shown above. Pileggi et al. disclose the claimed invention except for the teaching that the woven parallel yarns are spaced apart one-sixteenth of an inch to one inch. It should be noted that optimizing yarn spacing is a result effective variable. The smaller the spacing between the yarns directly affects the strength of the fabric. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the woven parallel yarns of Pileggi et al. be spaced from one-sixteenth of an inch to one inch apart, since it has been held that discovering an optimum value of a result effective variable involves only

Art Unit: 1771

routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the yarn spacing, motivated by the desire to create a fabric with increased strength and dimensional stability.

10. Claims 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pileggi et al. (US 5,488,912), as shown above, in view of Isley, Jr. et al. (US 5,649,398). Pileggi et al. disclose the claimed invention except for the teaching that the coating further includes a means for rendering the coating fire-resistant.

Isley, Jr. et al. disclose high strength fabric reinforced walls wherein a fire-resistant coating may be used (col 6, ln 49-52). It would have been obvious to one having ordinary skill in the art to have used Isley, Jr's fire resistant coating in the coating of Pileggi et al., motivated by the desire to create a coating that has some degree of fire resistance.

### **Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is (703) 305-0066. The Examiner can normally be reached Monday through Thursday from 6:30 AM to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor Terrel Morris can be reached at (703) 308-2414.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-2351.

Ula C. Ruddock  
Patent Examiner  
Art Unit 1771

*Ula Ruddock*